WHAT IS CLAIMED IS:

1. In optical communication boards detachable or mountable on racks of an optional optical communication system, the optical communication boards including a power control function, comprising:

optical modules for performing optical communication;

a plurality of power converters converting system power into necessary power to be supplied to the optical modules; and

a power controller performing a switching process to supply the power supplied through the power converters to the optical modules according to a power supplying control signal supplied through the racks of the optical communication system, while preventing the power supplied from the power converters from being supplied to the optical modules when mounted on the racks of the optical communication system.

2. The optical communication boards of claim 1, wherein the power controller comprises:

a switching unit performing a switching process to selectively supply the power supplied from each power converter to the optical modules; and

a communication controller performing communication with an operator terminal through a remote control line, and supplying a switching control signal for controlling opening and closing of the switching unit to the switching unit.

3. The optical communication boards of claim 2, wherein the switching unit is implemented by an application specific integrated circuit.

4. An optical communication system, comprising:

racks mounting optional boards thereon, and supplying system power to the mounted boards;

a remote control line remotely supplying a power supplying control signal to the optional boards mounted on the racks;

optical communication boards including optical modules, receiving the system power by being mounted on the racks, and selectively supplying the supplied system power to the optical modules according to the power supplying control signal supplied through the remote control line; and

a remote controller outputting the power supplying control signal to the optical communication boards through the remote control line in order to prevent the system power from being supplied to the optical modules when the optical communication boards are mounted on the racks while the system power is applied to the racks, and to supply the power to the corresponding optical modules when the system power is stable at a predetermined level by being applied to the optical communication boards.

5. The optical communication system of claim 4, wherein the optical communication boards comprise:

optical modules for performing optical communication;

a plurality of power converters converting system power into necessary power to be supplied to the optical modules; and

a power controller performing a switching process to supply the power supplied through the power converters to the optical modules according to a power supplying control signal supplied through racks of the optical communication system, while preventing the power supplied from the power converters from being supplied to the optical modules when mounted on the racks of the optical communication system.

6. The optical communication system of claim 5, wherein the power controller comprises:

a switching unit performing a switching process to selectively supply the power supplied from each power converter to the optical modules; and

a communication controller performing communication with an operator terminal through a remote control line, and supplying a switching control signal for controlling opening and closing of the switching unit to the switching unit.

7. The optical communication system of claim 5, wherein the power controller comprises:

a switching unit performing a switching process to selectively supply the power supplied from each power converter to the optical modules.

8. The optical communication system of claim 5, wherein the power controller comprises:

a communication controller performing communication with an operator terminal through

a remote control line, and supplying a switching control signal for controlling opening and closing of the power controller.

9. The optical communication system of claim 6, wherein the switching unit is implemented to an application specific integrated circuit.

10. The optical communication system of claim 9, with the application specific integrated circuit, when a high signal is inputted from the power converters, corresponding power is transmitted to the optical modules when a control value inputted through the communication controller is high, and when the control value is low, the power is not supplied to the optical modules.

11. The optical communication system of claim 9, with the application specific integrated circuit comprising a plurality of AND gates, when a high signal is inputted from the power converters, corresponding power is transmitted to the optical modules when a control value inputted through the communication controller is high, and when the control value is low, the power is not supplied to the optical modules.

12. A method of an optical communication system, comprising:

applying the system power to each optical communication board mounted on the system when the system power is turned on;

converting the system power into necessary power by corresponding power converters

according to each optical communication board;

determining whether a control signal for supplying power to the optical modules is received from an operator control terminal; and

applying the converted power to the corresponding optical modules when the control signal is received.

13. The method of claim 12, further comprising:

applying the system power to each optical communication board when an optional optical communication board is mounted while the power is applied to the system, and the system power is converted into necessary power by power converters installed in each optical communication board; and

applying the converted power to the optical modules when a power control signal for supplying power to the optical modules is received while the power is converted into the necessary power in the power converters.

14. The method of claim 13, with the mounting of the optional optical communication board being on racks of the optical communication system after system power is turned on.

15. A method of an optical communication system, comprising:

mounting optional boards on racks, and supplying system power to the mounted boards;

remotely supplying a power supplying control signal to the optional boards mounted on the

racks through a remote control line;

receiving, by optical communication boards including optical modules, the system power by being mounted on the racks;

selectively supplying the supplied system power to the optical modules according to the power supplying control signal supplied through the remote control line;

outputting, by a remote controller, the power supplying control signal to the optical communication boards through the remote control line in order to prevent the system power from being supplied to the optical modules when the optical communication boards are mounted on the racks while the system power is applied to the racks; and

supplying the power to the corresponding optical modules when the system power is stable at a predetermined level by being applied to the optical communication boards.

16. The method of claim 15, wherein a method of the optical communication boards comprise:

performing optical communication by optical modules;

converting system power into necessary power to be supplied to the optical modules by a plurality of power converters; and

performing, by a power controller, a switching process to supply the power supplied through the power converters to the optical modules according to a power supplying control signal supplied through racks of the optical communication system, while preventing the power supplied from the power converters from being supplied to the optical modules when mounted on the racks of the

optical communication system.

17. The method of claim 16, wherein a method of the power controller comprises:

performing, by a switching unit, a switching process to selectively supply the power supplied from each power converter to the optical modules; and

performing, by a communication controller, communication with an operator terminal through a remote control line, and supplying a switching control signal for controlling opening and closing of the switching unit to the switching unit.

18. An apparatus, comprising:

an optical module performing optical communication;

a power converter converting system power into necessary power to be supplied to the optical module; and

a power controller performing a switching process to supply the power supplied through the power converter to the optical module according to a power supplying control signal supplied while preventing the power supplied from the power converters from being supplied to the optical module when mounted on the racks of an optical communication system.

19. The apparatus of claim 18, with the power controller comprising:

a switching unit selectively supply the power supplied from each power converter to the optical module; and

a communication controller performing communication with an operator terminal through a remote control line, and supplying a switching control signal controlling opening and closing of the switching unit to the switching unit.

20. The optical communication boards of claim 19, further comprising a remote controller outputting the power supplying control signal through the remote control line in order to prevent the system power from being supplied to the optical module when mounting on the racks while the system power is applied to the racks, and to supply the power to the corresponding optical module when the system power is stable at a predetermined level.